

CLAIMS

What is claimed is:

- 1 1. A method of providing security for a computer system, the method comprising
2 the acts of:
3 generating a request for a file;
4 receiving the request at a dedicated security processor;
5 using the dedicated security processor to access the file;
6 using the dedicated security processor to validate the requested file; and
7 providing the file to an other processor, if the requested file is validated.
- 1 2. The method, as set forth in claim 1, comprising the act of validating a user
2 access to execute the request.
- 1 3. The method, as set forth in claim 2, comprising the act of responding to the
2 other processor with an abort message if the user access is invalid.
- 1 4. The method, as set forth in claim 2, comprising the act of enabling the other
2 processor to continue processing the file, if the user access is validated.
- 1 5. The method, as set forth in claim 1, comprising the act of disabling the other
2 processor once the file is requested and enabling the other processor to continue processing
3 after the requested file is validated.
- 1 6. The method, as set forth in claim 1, wherein accessing the file comprises
2 loading the file from a system memory.

1 7. The method, as set forth in claim 1, wherein accessing the file comprises
2 loading a memory resident file.

1 8. The method, as set forth in claim 1, wherein the dedicated security processor is
2 in a remote computer system.

1 9. The method, as set forth in claim 1, wherein the other processor and the
2 dedicated security processor are disposed in a computer system.

1 10. The method, as set forth in claim 1, comprising the act of setting a return
2 status field to valid, if the requested file is valid.

1 11. The method, as set forth in claim 1, wherein the act of generating the request
2 comprises the acts of:
3 setting a semaphore;
4 forwarding the semaphore to the dedicated security processor; and
5 blocking further processing of the file, if the semaphore is not set to a specific
6 setting.

1 12. The method, as set forth in claim 1, wherein the act of validating the requested
2 file comprises the act of accessing a database for a digital signature of the file being
3 requested.

1 13. The method, as set forth in claim 12, wherein the act of validating the
2 requested file comprises the act of calculating a secure hash and comparing the calculated
3 secure hash to a stored secure hash.

1 14. The method, as set forth in claim 1, wherein the act of validating the requested
2 file comprises the act of accessing a database for an error checking and correction ("ECC")
3 code corresponding to the requested file.

1 15. The method, as set forth in claim 14, wherein the act of accessing the database
2 comprises the act of correcting the file by utilizing the ECC code corresponding to the
3 requested file.

1 16. A method of providing security for a computer system, the method comprising
2 the acts of:
3 generating an identifying number from a security processor;
4 providing the identifying number to an other processor in the computer system;
5 incorporating the identifying number into a request for a file;
6 delivering the request to the security processor;
7 using the security processor to access the file;
8 using the security processor to validate the requested file;
9 verifying the identifying number at the security processor; and
10 providing the file, if the requested file is validated and the identifying number is
11 verified.

1 17. The method, as set forth in claim 16, comprising the act of enabling the other
2 processor to continue the processing, if the identifying number is validated.

1 18. The method, as set forth in claim 16, comprising the act of terminating the
2 access if the identifying number is invalid.

1 19. The method, as set forth in claim 16, wherein the security processor is in a
2 remote computer system.

1 20. The method, as set forth in claim 16, wherein the other processor and the
2 security processor are disposed in the computer system.

1 21. The method, as set forth in claim 16, wherein the identifying number is a
2 nonce.

1 22. The method, as set forth in claim 16, wherein the identifying number is a
2 time stamp.

1 23. The method, as set forth in claim 16, wherein the act of validating the
2 requested file comprises the act of accessing a database for an error checking and correction
3 ("ECC") code corresponding to the requested file.

1 24. A computer system comprising:
2 means for validating a file at a security processor, wherein the means for validating
3 the file comprises:
4 means for storing a record in a memory used to validate the file;
5 means for verifying the record against the file at the security processor; and
6 means for indicating that the file is verified to an other processor.

1 25. The system, as set forth in claim 24, comprises means for validating a user
2 access.

1 26. The system, as set forth in claim 24, wherein the means for verifying
2 comprises:
3 means for storing a public key and a hash algorithm used to validate the file;
4 means for storing an encrypted hash correlative to the requested file in the record; and
5 means for comparing the record with the requested file.

1 27. The system, as set forth in claim 24, comprises means for verifying an
2 identifying number in a request at the security processor.

1 28. A networked computer system comprising:
2 a plurality of computer systems;
3 a network coupled to each of the plurality of computer systems;
4 at least one of the plurality of computer systems comprising:
5 a first processor;

6 a security processor operatively coupled to the first processor;
7 a first section of memory configured to store a file, the first section of memory
8 being operatively coupled to the first processor and the security processor; and
9 a second section of memory being configured to store a validation program
10 that is initiated by the security processor, the validation program having a validation
11 routine configured to validate the file stored in the first section of memory when the
12 security processor receives a request for the file, and the validation program using an
13 encrypted code to validate the file.

1 29. The system, as set forth in claim 28, wherein a second processor in a second of
2 the plurality of computer systems is adapted to utilize the security processor for validating the
3 file.

1 30. The system, as set forth in claim 29, wherein the memory is a memory resident
2 file.

1 31. The system, as set forth in claim 28, wherein the request comprises a
2 semaphore and an address for the semaphore, wherein the semaphore blocks the processor
3 from executing the file, if the semaphore is set in a specified manner.

1 32. The system, as set forth in claim 28, wherein a second processor in a second of
2 the plurality of computer systems is adapted to generate a request for the file from the security
3 processor and is adapted to receive the validated file from the security processor.